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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,149	03/29/2004	Hiroshi Kawazoe	032915-0154	8476
22428	7590	12/21/2005	EXAMINER	
FOLEY AND LARDNER LLP			POPE, DARYL C	
SUITE 500			ART UNIT	
3000 K STREET NW			PAPER NUMBER	
WASHINGTON, DC 20007			2632	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **10/811,149**

Applicant(s)

KAWAZOE ET AL.

Examiner

DARYL C. POPE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-8 and 23-51 is/are allowed.
- 6) ☒ Claim(s) 1,2,9-11,13,15-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 12,14,18,19,21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/29/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

ART REJECTION:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1,9-11,13,15-17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi(6,014,595).**

-- In considering claims 1 and 10-11, and 13, the claimed subject matter that is met by Kobayashi includes:

- 1) the vibration sensor is met by vibration sensors(606-618);
- 2) the processor in communication with the sensor and analyzing a vibration signal to determine frequency of vibration which is indicative of tire contact with a rumble strip is met by the vibration signal analyzer(802) which receives signals from the vibration sensors so as to determine frequency of vibration(see: column 6, lines 42 et seq).

With regards to the sensor being in communication with the sprung or unsprung mass, use of various sensor for determining vibration in a vehicle is well known in the art, and as well the examiner takes Official Notice that in the vehicle art, use of sensors in communication with sprung and unsprung masses, and as well gravity sensors for determining vibration are well known in the art, and therefore, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above stated devices into the system of Kobayashi, since one of ordinary skill would have recognized the advantage that each particular sensor would have provided in order to determine the vibration of a vehicle due to contact with a rumble strip.

-- With regards to claim 9, the microphone for outputting a signal indicative contact with a rumble strip is met(see: column 4, lines 53-57).

-- Claim 15-17,20, recites subject matter that is met as discussed in claim 1 above(see: column 10, lines 22 et seq).

Allowable Subject Matter

3. Claims 3-8, and 23-51 are allowed.

4. Claims 12,14,18-19, and 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARYL C. POPE whose telephone number is 571-272-2959. The examiner can normally be reached on M-TH 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DANIEL J. WU can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

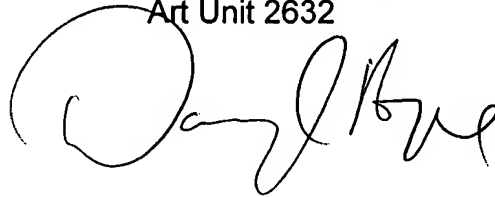
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daryl C. Pope

Dec. 6, 2005

DARYL C POPE
Primary Examiner
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A handwritten signature in black ink, appearing to read 'Daryl C. Pope', is written over the printed name and title.